

Texas Water Development Board

Infrastructure Project Financing

Topics

- What is the Texas Water Development Board (TWDB)?
- What financing tools do we offer?
- How can the TWDB help you?



Texas has always been associated with opportunity, productivity, and growth.





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Our water resources are at the heart of
that reputation...

TWDB History is Texas History

...and sometimes they are in short supply.

1822

- Central Texas colonists led by Stephen F. Austin lose their initial food crops to drought

1884

- Settlers in West Texas return to the east after crops fail

1956

- **Drought of Record:** severe statewide drought

1957

- **Texas Water Development Board** created; statewide water planning begins

2011

- Severe statewide drought returns

TWDB History is Texas History

1869

- Bastrop evacuates as flood waters reach 46 feet

1925

- Flooding destroys 13 bridges and drowns 51 people in San Antonio

1935

- Downtown Houston inundated by flooding of the Buffalo Bayou

1949

- Fort Worth flooded by the Trinity River, causing \$10M in damage and killing 10 people

1952

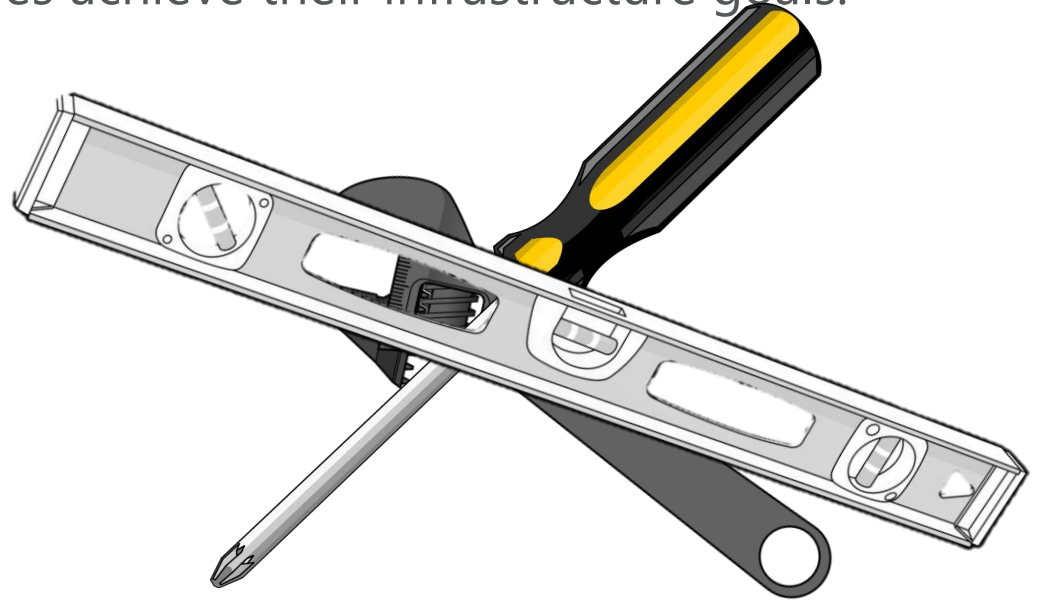
- Flooding in Central Texas kills 5 and destroys 17 homes

2015

- Blanco River rises 36ft in a few hours, washing away entire residential blocks in Wimberley

A Toolbox for Public Water Utilities

The legislature has entrusted the TWDB with a set of financing tools to help public utilities achieve their infrastructure goals. Each tool is unique, and some are designed for special purposes.



Projects serving **Right Priority Distressed** Areas
projects for future demand

A Toolbox for Public Water Utilities



Agricultural Water Conservation Loans/Grants (AG)



Clean Water State Revolving Fund (CWSRF)



Drinking Water State Revolving Fund (DWSRF)



Economically Distressed Areas Program (EDAP)



Rural Water Assistance Fund (RWAF)



State Participation Program (SP)



State Water Implementation Fund for Texas (SWIFT)



Texas Water Development Fund (DFund)

How Can These Tools Work for You?


AAA Bond Rating

Funding to accommodate
projects of all sizes




Some projects qualify for
combined funding through
multiple programs

All project phases are eligible for
funding

Eligible Applicants

	SWIFT	CWSRF	DWSRF	EDAP	RWAF	SP	DFund
Political subdivisions							
Non-profit water supply corporations							
Investor-owned utilities							

Eligible Projects

	SWIFT	CWSRF	DWSRF	EDAP	RWAF	SP	DFund
Water Supply – Current Need							
Water Supply – Future Need							
Water Treatment							
Water Transmission & Distribution							
Potable Reuse							
Wastewater Collection							
Wastewater Treatment							
Nonpoint Source Pollution Control							
Flood Control/ Stormwater Management							

State Revolving Fund (SRF) Programs

- Partially funded by the U.S. Environmental Protection Agency (EPA)
- Subsidized financing
- Partial principal forgiveness available for certain project types
- Multi-year commitment option

Drinking Water State Revolving Fund (DWSRF)



Offers financing 125 basis points below the applicant's market interest rate



Repayment terms up to 30 years



Partial principal forgiveness available for Disadvantaged Communities, Very Small Systems, Urgent Need projects, and projects with green components

Sample DWSRF Project

Stamford

Water System Improvements

- 1950s-era treatment plant needs improvements
- Replacing 15 miles of 18" pipe to address water loss
- Replacement of WWII-era elevated storage tank
- Disadvantaged: \$9,282,728 principal forgiveness
- Green project: \$952,980 principal forgiveness
- \$19,765,708 total DWSRF loan
- Cost savings: **\$18,807,932**



Clean Water State Revolving Fund (CWSRF)



Offers financing up to 155 basis points below the applicant's market interest rate



Repayment terms up to 30 years



Partial principal forgiveness available for Disadvantaged Communities and projects with green components

Sample CWSRF Project

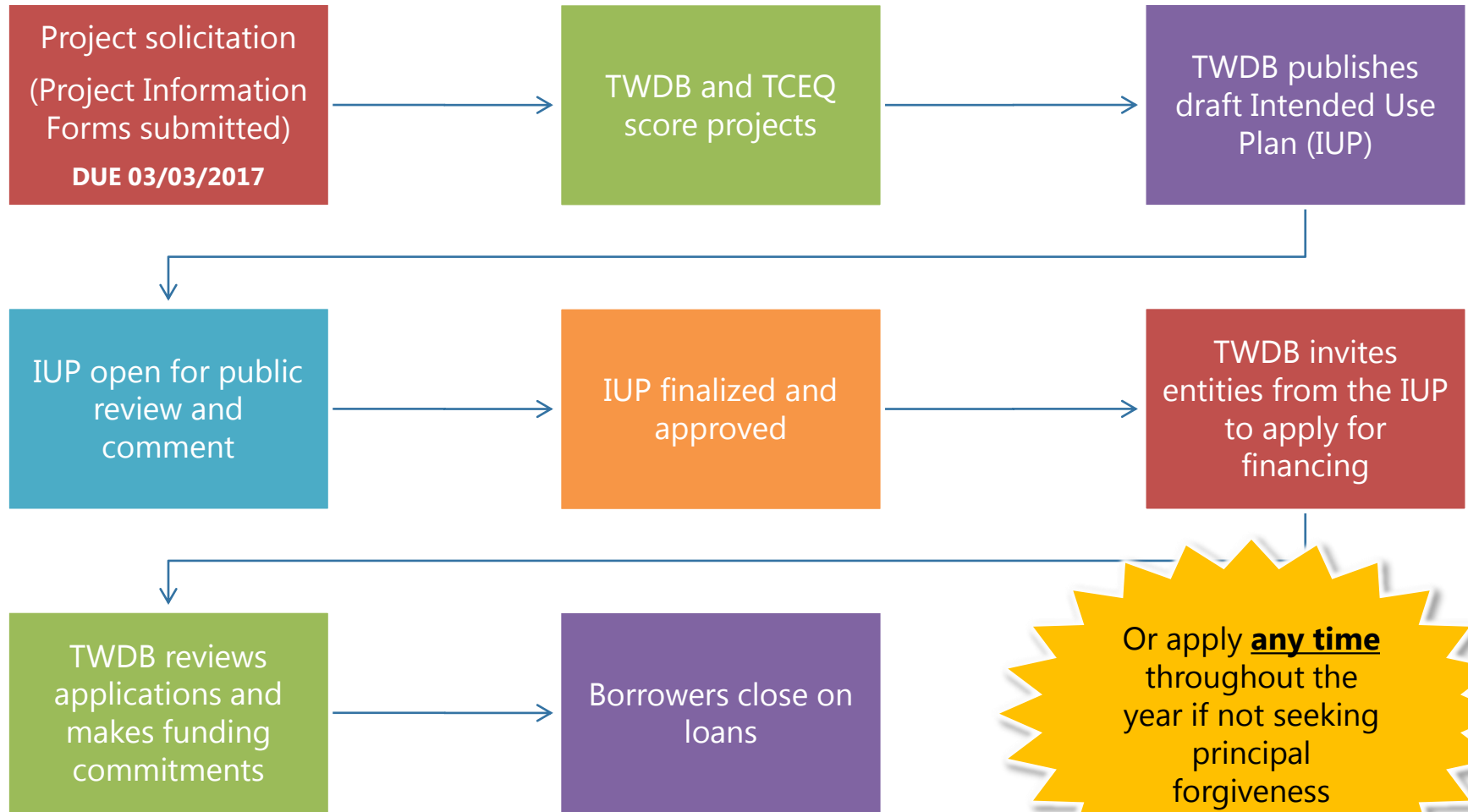
Houston

Collection System Rehabilitation

- Ongoing effort to renew at least 600,000 linear feet of collection system each year
- Pipe sizes range from 6" to 72"
- Project will reduce sanitary sewer overflows
- Inflow and infiltration are addressed, resulting in optimized performance
- \$65,750,000 total CWSRF loan
- Cost savings: **\$19,499,242**



SRF Annual Funding Cycle





Primary SRF Program Requirements

- Disadvantaged Business Enterprise (DBE) procurement
- Environmental review
- Davis-Bacon prevailing wage rates
- American Iron & Steel

Technical assistance available!



State-Funded Programs

- Funded with bond proceeds (AAA bond rating)
- Loans based on TWDB's cost of funds
- Grants available (EDAP)
- Subsidization and deferral available (SWIFT)



State Water Implementation Fund for Texas

Eligible Projects

- Recommended water management strategies in the state water plan
- Includes a wide range of water supply and conservation projects

Financing Options

- Low-interest loans
- Deferred loans
- Board Participation
- Multi-year commitments

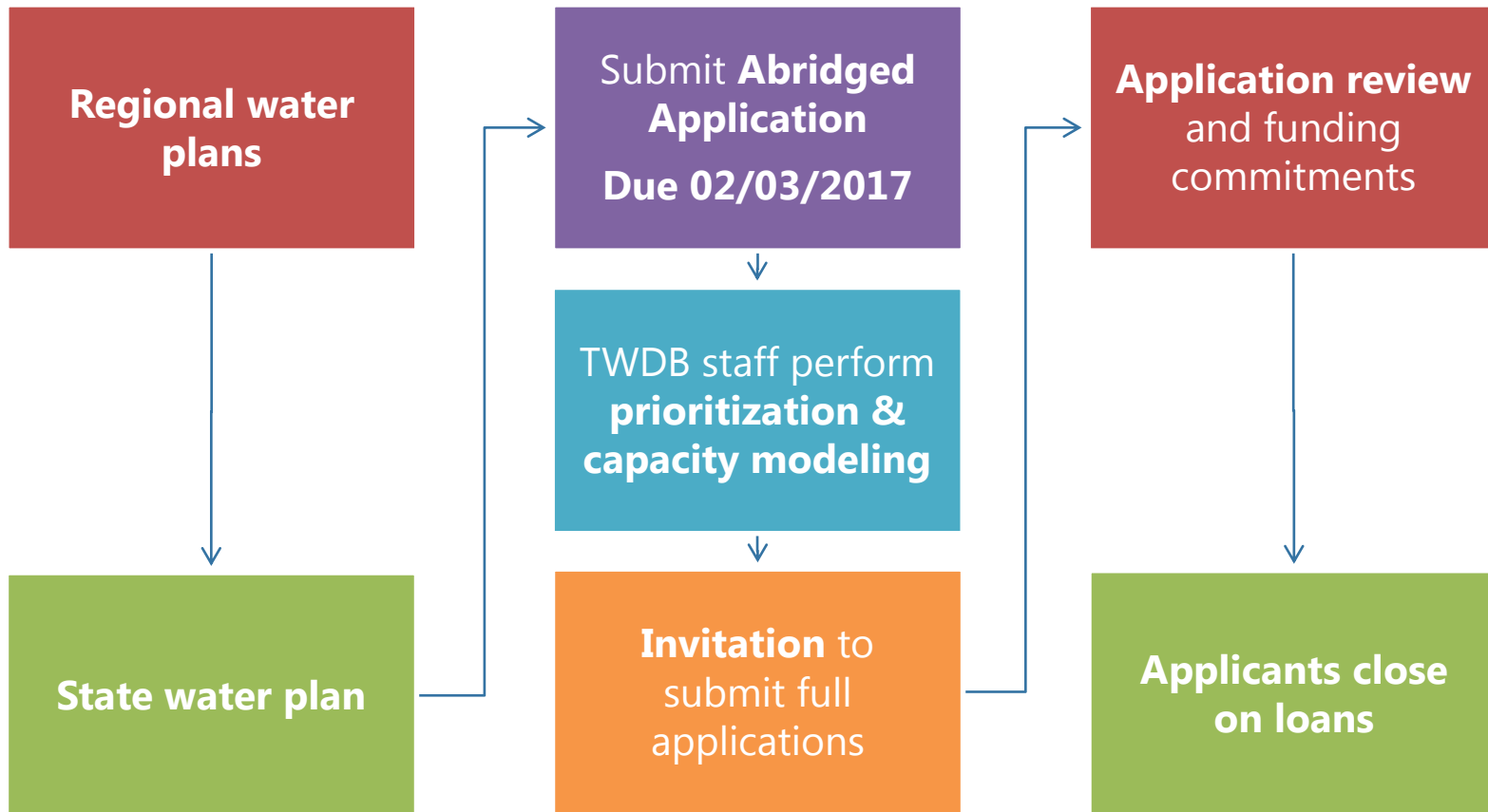
New for 2017

- Low-interest loan interest rate subsidies specified for taxable financing and rural entities

Term	Low-Interest Loans		Subsidized Rural/Agriculture	
	Tax-Exempt	Taxable	Tax-Exempt	Taxable
20 Years	35%	28%	50%	40%
21-25 Years	25%	20%	33.5%	27%
26-30 Years	20%	16%	26.15%	21.5%

- Rural: communities with population of 10,000 or fewer, not located within the extraterritorial jurisdiction of any city with population of 500,000 or greater.

SWIFT Funding Cycle



Sample SWIFT Project

Austin

Direct Reuse

- Supply needs identified in regional planning will be met by increased conservation and expanded use of reclaimed water
- Rehab and expansion of filtration systems, new storage tank and pump stations, and approximately 74,000 feet of transmission mains
- \$86,900,000 SWIFT *multi-year* commitment
- Cost savings: **\$2,035,348!** (on \$20 million closed in 2016)



**APPLICATION FOR FINANCIAL ASSISTANCE
FOR WATER AND WASTEWATER INFRASTRUCTURE PROJECTS**

This application is comprehensive and contains all the information needed to apply for water and wastewater infrastructure financing through the Swift Texas Water Development Board (TWDB) program. The information provided in this application is required for the review process for both the applicant and the Board. This application must be submitted by the applicant, including water supply corporations.

Please submit one double-sided original and one indexed, electronic copy, via electronic storage media such as CD or flash drive using MS Word, Excel and/or Adobe Acrobat.

Please submit your application to:

Texas Water Development Board
Water Supply and Infrastructure-Regional Water Planning and Development
P O Box 13231
1700 N. Congress Avenue, 5th Floor
Austin, Texas 78711-3231
(78701 for courier deliveries)

A complete application consists of all of the applicable information and forms requested in this document. When preparing this application please review the Application and all Guidance and Forms, listed at the end.

For more information, please contact your Regional Project Implementation Team at:

http://www.twdb.texas.gov/financial/programs/swift/regional_project_teams.asp

Thank you.

TWDB Use Only

Name of Applicant: _____

Date application received: _____

Date administratively complete: _____

SWIFT is the only state-funded program with an application deadline. Applications for the other state programs are accepted at any time.

EDAP assists projects in areas where:

- Income is not greater than 75% of statewide median
- Infrastructure is substandard or doesn't exist
- Model Subdivision Rules (MSRs) are in place to prevent further substandard development

EDAP Offers **Grants**

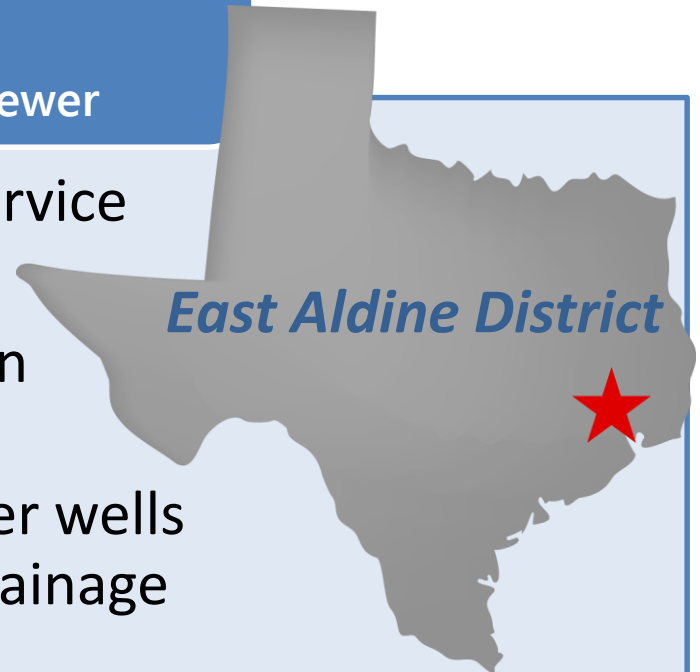
- Grant/loan ratio depends on project phase and affordability calculation
- Nuisance determination required for > 50% grant
- Popular program...current bonding capacity has been met

Sample EDAP Project

East Aldine Management District

Sherwood and Benton Place Water and Sewer

- First-time water & wastewater service to two areas
- Documented > 50% failure rate on private septic systems
- Small lot size means shallow water wells are less than 50 ft. from septic drainage
- DSHS Nuisance Determination
- \$10,912,331 total EDAP assistance
- **\$10,335,331 grant!**





Ag Conservation Loans

- Projects that improve irrigation efficiency
- Purchase and installation of devices to measure use of irrigation water
- Technical assistance programs
- Research, demonstration, technology transfer, or educational programs
- ...and more

Sample Ag Conservation Loan Project

Panhandle Groundwater Conservation District

- TWDB financing allows the District to make loans to individual farmers for more efficient irrigation systems
- \$2,000,000 loan
- Cost savings: **\$206,475**



Ag Conservation Grants



Accepting applications now!

(Due Feb. 15)

- Capacity: up to \$200,000 per project
- Water use monitoring equipment, demonstration and technology transfer, irrigation efficiency studies
- Cameron.Turner@twdb.texas.gov

Flood Protection Grant Programs



Flood Protection Planning

- Grants to conduct feasibility studies for structural and non-structural solutions to flood hazards in an entire watershed



Flood Mitigation Assistance

- Federal funding for cost-effective measures to reduce or eliminate long-term flooding risk



Severe Repetitive Loss

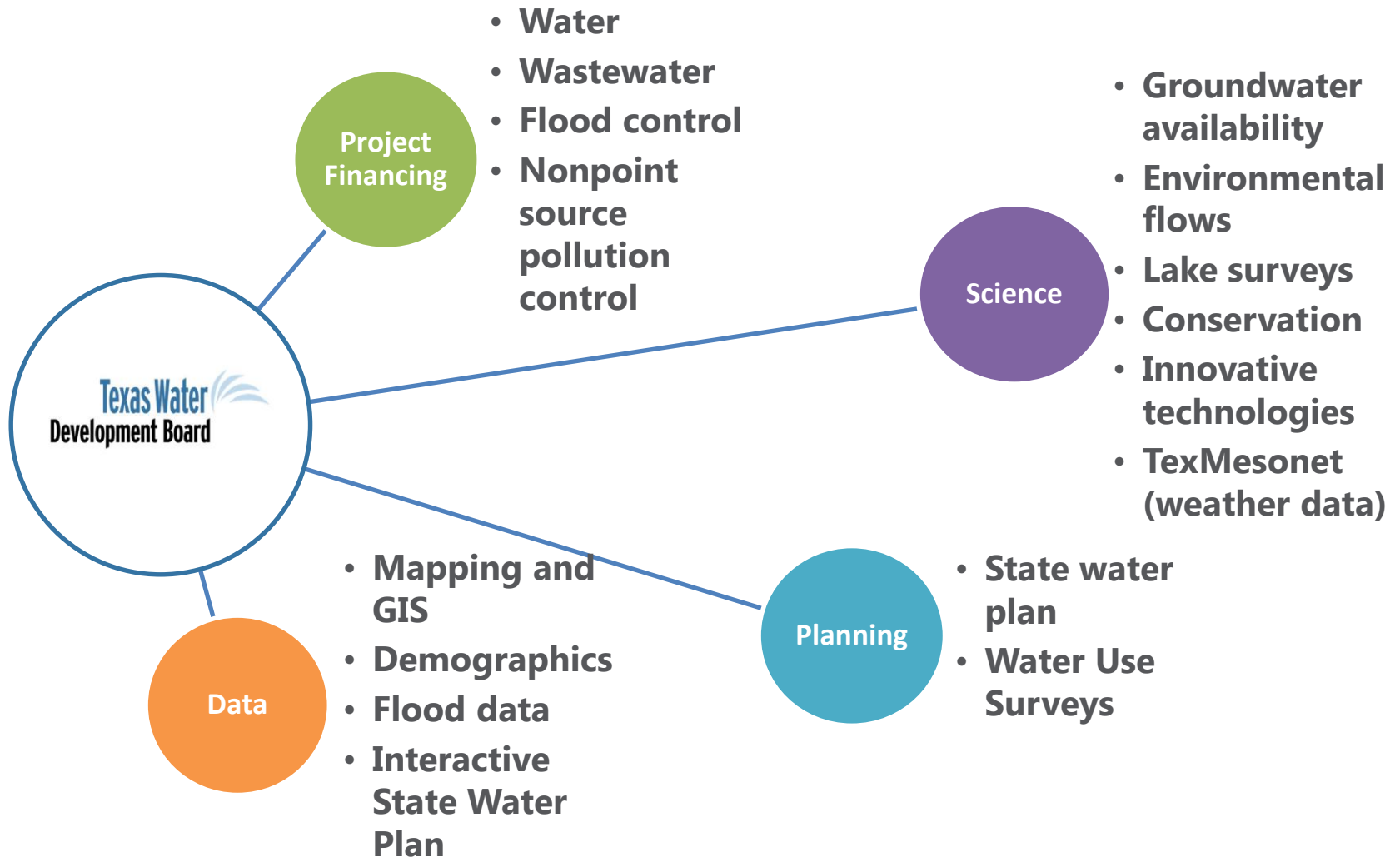
- Federal funding to assist implementation of mitigation measures to reduce or eliminate long-term risk



Primary State Program Requirements

- Water conservation and drought contingency plans
- Environmental review
- U.S. Iron & Steel (except SWIFT)
- Water loss threshold requirements

Other TWDB Resources



View data for All of Texas GO

TEXAS

Population



Interactive State Water Plan
texasstatewaterplan.org



© OpenStreetMap contributors, ©

Development of the state water plan is central to the mission of the Texas Water Development Board. Based on 16 regional water plans, the plan addresses the needs of all water user groups in the state – municipal, irrigation, manufacturing, livestock, mining, and steam-electric power – during a repeat of the drought of record that the state suffered in the 1950s. The regional and state water plans consider a 50-year planning horizon: 2020 through 2070.

This website lets water users statewide take an up-close look at data in the 2017 State Water Plan and how water needs change over time by showing:

- o projected water demands,
- o existing water supplies,
- o the relative severity and projected water needs (potential shortages),
- o the water management strategies recommended to address potential shortages, and
- o recommended capital projects and their sponsors.

AUSTIN

Water User Group in Hays, Travis, and Williamson

Population

2,000,000

1,000,000

0

2020

2030

2040

2050

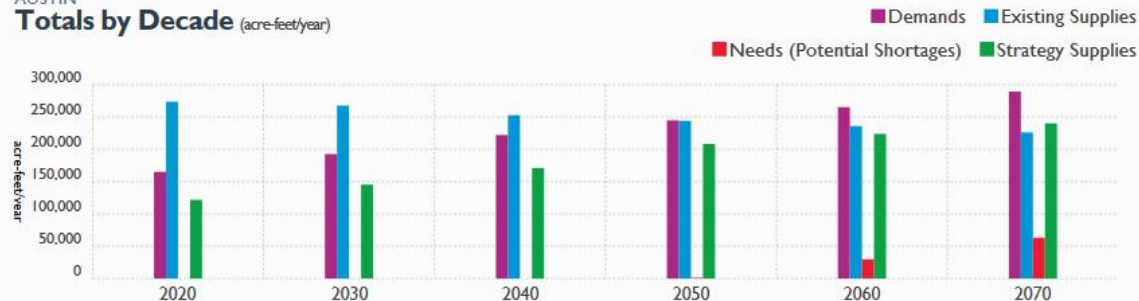
2060

2070

SHOW DATA TABLE

AUSTIN

Totals by Decade (acre-feet/year)



	2020	2030	2040	2050	2060	2070
Demands	165,155	192,601	222,063	244,835	265,235	289,368
Existing Supplies	273,736	267,697	252,830	244,121	235,981	226,174
Needs (Potential Shortages)	0	0	0	1,231	29,821	63,194
Strategy Supplies	121,755	145,325	171,083	208,289	223,957	240,141

AUSTIN

Water Management Strategies (acre-feet/year)

Strategy ▲	2020	2030	2040	2050	2060	2070
CITY OF AUSTIN - AQUIFER STORAGE AND RECOVERY	10,000	25,000	25,000	50,000	50,000	50,000
CITY OF AUSTIN - CAPTURE LOCAL INFLOWS TO LADY BIRD LAKE	1,000	1,000	1,000	1,000	1,000	1,000
CITY OF AUSTIN - CONSERVATION	22,969	24,559	28,317	31,220	33,822	36,899
CITY OF AUSTIN - DIRECT REUSE	5,429	10,429	20,429	22,929	25,429	27,929
CITY OF AUSTIN - INDIRECT POTABLE REUSE THROUGH LADY BIRD LAKE	20,000	20,000	20,000	20,000	20,000	20,000



TEXAS  OD.org

What to Do? Before, During, and After a Flood

How to Get Started

CONTACT US!

Team 1 **Lee Huntoon**
Panhandle/West (512) 463-6021
Regions: A/O/E/F

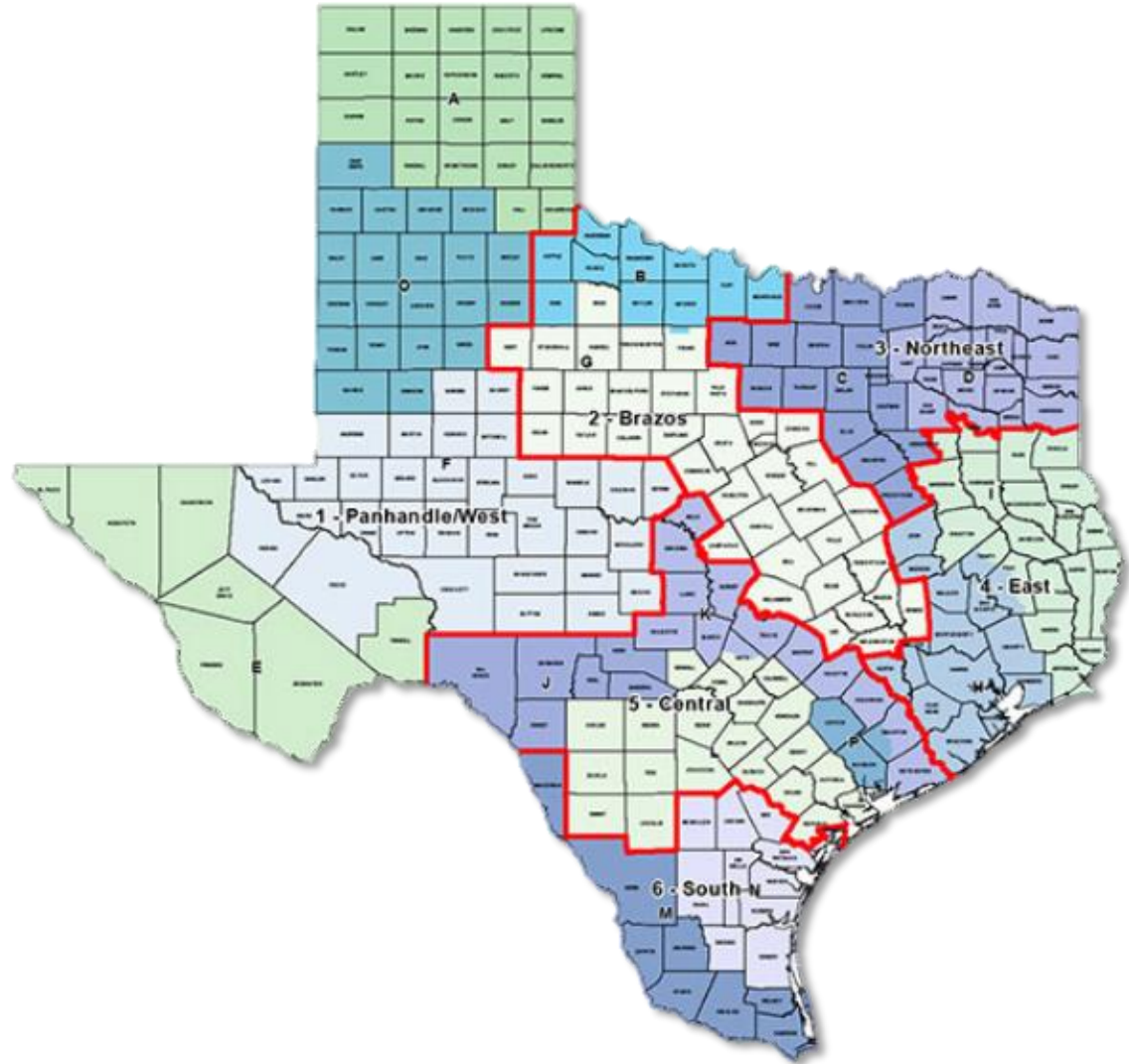
Team 2 **Caaren Skrobarczyk**
Brazos (512) 475-1128
Regions: G/B

Team 3 **Luis Farias**
Northeast (512) 475-4816
Regions: C/D

Team 4 **Nancy Richards**
East (512) 463-0250
Regions: H/I

Team 5 **Dain Larsen**
Central (512) 463-1618
Regions: J/K/L/P

Team 6 **Mireya Loewe**
South (512) 475-0590
Regions: M/N



Pre-Application Meetings



Thank You!

Tom Entsminger

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(512) 936-0802

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